

263.8 mg/dL, 42% were females and 31.3% were diagnosed with diabetes mellitus. The mean pre-switch LDL-C was 143 mg/dL, mean post-switch LDL-C was 126.6 mg/dL, mean percentage reduction was 7.8%, and the mean time before the final switch was 143.6 days (median 80 days). In a paired comparison test, the reduction in post-switch LDL-C was significant at $< 1\%$. In a multivariate analysis, the time to switch to higher potency after LDL-C measurement has no significant effect on post-switch LDL-C reduction. After switch 42 (27.45%) attained goal LDL-C level. **CONCLUSIONS:** Switching to higher potency statins reduces LDL-C levels by only an additional eight percent (8%) resulting in majority (72.55%) of the patients in clinical practice failing to attain recommended LDL-C goal even after up titration on statins.

PCV72

CHOLESTEROL GOAL ATTAINMENT AMONG PATIENTS TREATED WITH LIPID LOWERING DRUGS IN HUNGARY

Márk L¹, Zámoly K², Alemão E³, Nagy L⁴, Monori M⁵, Yin D³

¹Békés County Hospital, Gyula, II, Gyula, Hungary; ²Bajcsy-Zsilinszky Hospital, IV, Budapest, Hungary; ³Merck & Co, Whitehouse Station, NJ, USA; ⁴MSD Hungary Kft, Budapest XII, Hungary; ⁵Schering Plough, Budapest, Hungary

OBJECTIVES: Assess TC goal (< 5 mmol/L) attainment among CHD/CHD equivalent patients and nonCHD patients with multiple risk factors that were prescribed lipid-lowering drugs (LLD). **METHODS:** Retrospective cohort study at 44 randomly selected centres across Hungary (30 primary care and 14 outpatient lipid centres). Physicians at selected centers consecutively identified 10 eligible patients. Adults (≥ 18 years) that were either CHD/CHD equivalent or nonCHD with multiple risk factors and prescribed lipid lowering therapy were eligible. Date of first LLD was considered as index date, medical records were reviewed by physicians to collect patient characteristics, baseline and follow-up laboratory values, treatment, and resources use data. **RESULTS:** A total of 440 patients (71% CHD/CHD equivalent patients and 29% nonCHD with multiple risk factors) were included in the study. Mean age was 61.5 years (SD 10.3), 51.5% were female; mean baseline TC for CHD/CHD equivalent patients was 6.9 mmol/L (SD 1.6) and 7.3 mmol/L (SD 1.4) for nonCHD patients. Statins were initial LLD in 75.9% patients followed by fibrates (23.6%). The majority (87%) were initiated either on simvastatin 10mg or simvastatin 20mg, or equipotent statin. Of the patient not at goal at baseline 31% CHD and 23% nonCHD patients attained TC goal at the end of the study period. In a logistic model for goal attainment, patients with high baseline TC (OR = 0.53 95% CI 0.35–0.80) and having fibrates as initial LLD (OR = 0.39 95% CI 0.22–0.73) compared to those with statins as initial LLD were less likely to reach goal. **CONCLUSIONS:** Overall, only 15% attained TC goal on initial LLD, and only an additional 11% attained goal after change in LLD, resulting in 74% of patients not attaining goal with current LLD dominated by statins. More effective therapy is needed in these patients to help achieve their cholesterol goals.

CARDIOVASCULAR

CARDIOVASCULAR—Methods and Concepts

PCV73

COSTS ASSOCIATED WITH ALTERNATIVE FETAL CARDIOLOGY REFERRAL MODES: APPLICATION OF PROPENSITY SCORE MATCHING

Mistry H, Young TA, Dowie R

Brunel University, Uxbridge, UK

OBJECTIVES: Propensity score matching (PSM) is a method used to address selection bias in observational studies and to date has been used mainly in survival analysis. This study has used PSM when determining antenatal costs for alternative referral modes (via telemedicine (TM) or direct referral) for obtaining specialist advice for pregnant women at risk of a fetal cardiac anomaly. **METHODS:** Three district hospitals (DH) in south-east England were offered the use of a fetal cardiology telemedicine service. Two hospitals (DH1 and DH3) continued to refer all patients directly to London, while the third hospital (DH4) used both referral modes. A logistic regression model was fitted to women in DH4 in order to predict what proportions of women in DH1 and DH3 would have been seen via TM, had that service been taken up. PSM was then used to match “TM” cases to “direct referral” cases. A total cost per woman was obtained for all antenatal resource use incurred during the study and the costs were adjusted for those predicted as TM cases. Finally, the costs for the predicted modes and matched modes were compared. **RESULTS:** The logistic regression model predicted 153 women be assessed via TM and the remainder ($n = 84$) as direct referrals. Mean antenatal cost per patient for the TM group was slightly higher (stg606), although not significantly so, compared with the direct referral group (stg561). After applying PSM, 66 TM cases were matched to 55 direct cases. The magnitudes of the PSM costs (TM group, stg671, and direct group, stg551) were similar to the logistic regression model. Comparisons of cost results by referral mode and analytical method were not statistically significant. **CONCLUSIONS:** PSM indicated that the cost results from the logistic regression model were reliable. We conclude that there is a role for PSM in economic evaluation.

PCV74

A METHOD FOR IDENTIFYING PATIENTS WITH CHRONIC ANGINA FROM ADMINISTRATIVE CLAIMS DATA

Watson JB¹, Lee DW², Kadlubek PJ², Haberman M², Goldberg GA²

¹CV Therapeutics, Palo Alto, CA, USA; ²Constella Health Strategies, Herndon, VA, USA

OBJECTIVE: Administrative claims data are widely used to study disease treatment patterns and costs. A valid, claims-based definition method is needed to identify patients with chronic angina (CA) from these data. **METHODS:** Five cardiologists and one internist with claims-coding expertise developed an initial series of increasingly specific, claims-based definitions of CA. Claims data from 2001 to 2002 were used to determine the number and demographic characteristics of patients who met these criteria. This information was used to determine a final definition for patients with CA that has acceptable levels of qualitatively assessed sensitivity and specificity. **RESULTS:** The panel reviewed relative patient count and demographic information and developed the following claims-based definition for CA: Patients aged ≥ 35 years who were: a) diagnosed at least twice with CA (ICD-9-CM codes 413.xx) and filled two nitrate, beta-blocker or calcium channel blocker prescriptions with at least 30 days between prescriptions; b) filled two nitrate prescriptions, were diagnosed with chest pain (ICD-9-CM 786.50, 786.51 or 786.59), and were either diagnosed with coronary artery disease (CAD) or had a CAD-related procedure; or c) filled two nitrate prescriptions with at least 30 days between prescriptions, were diagnosed with CAD and had one CA claim. **CONCLUSIONS:** Patients with CA can be identified from administrative claims data with different levels of specificity and sensitivity. More studies are needed to confirm criteria validity of these criteria and to examine the clinical and economic impact of CA in contemporary medical practice.